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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,099	09/30/2003	David D. Brandt	02AB201/YOD ALBR:0123	4810
7590 05/06/2005 Alexander M. Gerasimow Allen-Bradley Company, LLC 1201 South Second Street Milwaukee, WI 53204-2496			EXAMINER ESTRADA, ANGEL R	
			ART UNIT 2831	PAPER NUMBER

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/675,099

Applicant(s)

BRANDT ET AL.

Examiner

Angel R. Estrada

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-37 is/are allowed.
- 6) ☒ Claim(s) 14, 15, 17-28, 31, 38, 40 and 41 is/are rejected.
- 7) ☒ Claim(s) 16, 29, 30 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 40 is objected to because of the following informalities:

Claim 40 line 1, after "wherein" delete --if--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 15, 18-21 and 38, 40 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al (US 5,295,843; hereinafter Davis).

Regarding claim 14, Davis discloses a rail system (see figures 1 and 8-10) for transmitting power and data signals comprising: an insulative support (1); first and second power conductors (6, see figure 8) supported lengthwise on the support (1, see figures 8 and 9) via an elongated support edge and configured to conduct electrical power (column 4 lines 25-27); and first and second data conductors (4,5) supported lengthwise on the support (1, see figures 8 and 10) via an elongated support edge and disposed between the power conductors (6) and configured to transmit data signals (column 4 lines 25-27); wherein each of the power and data conductors (6; 4,5) present a respective elongated connection edge (see figures 1 or 8) opposite the respective

support edge (see figures 1, 8-10) , the connection edges being generally aligned for receiving respective connectors elements (column 3 lines 52-column 4 lines 32).

Regarding claim 15, Davis discloses the system (see figures 1 and 8-10), wherein the power conductors (6) at least partially shield the data conductors (4,5) from electromagnetic interference (since the data connectors are between the first and second power conductors, see figure 1).

Regarding claim 18, Davis discloses the system (see figures 1 and 8-10), wherein the conductors (4-6) are uninsulated conductive rails (column 3 lines 7-10)

Regarding claim 19, Davis discloses the system (see figures 1 and 8-10), wherein the first and second data conductors (4,5) are spaced from one another by a first, substantially constant predetermined distance (see figures 1 and 8).

Regarding claim 20, Davis discloses the system (see figures 1 and 8-10), wherein the first and second power conductors (6) are spaced from respective data conductors (4,5) by a second substantially constant predetermined distance (see figures 1 and 8).

Regarding claim 21, Davis discloses the system (see figures 1 and 8-10), wherein the first predetermined distance is equal to the second predetermined distance (see figures 1 and 8).

Regarding claim 38, Davis discloses a rail system (see figures 1- and 8-10), comprising an insulative support (1); a first and second rail power conductors (6) mounted to the insulative support (see figure 8); first and second rail data conductors (4,5) mounted to the insulative support (1), wherein the data conductors and the power

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conductors (4-6) are substantially parallel to one another (see figure 8); wherein each the rail data conductor and the rail power conductor is mechanically engageable with a plurality of connectors at a plurality of location (see figure 1, left side connector), each connector being connected to a different electrical component (column 3 line 52-column 4 line 32).

Regarding claim 40, Davis discloses the rail system (see figures 1- and 8-10), wherein the first and second data conductors (4,5) are disposed between the first and second power conductors (, see figure 8).

Regarding claim 41, Davis discloses the rail system (see figures 1- and 8-10), wherein the rail power conductors (6) and the rail data conductors (4,5) extend over at least three-fourths of the length of the insulative support (see figures 1 and 8).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17, 22-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (US 5,295,843; hereinafter Davis).

Regarding claim 17, Davis discloses the claimed invention except for the system further comprising a second set of power conductors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding claim 22, Davis discloses a rail system (see figures 1 and 8-10) for transmitting power and data signals comprising: an insulative support (1); a first set of power conductors (6, see figure 8 and 9) supported lengthwise on the support (1) and configured to conduct electrical power (column 4 lines 25-27); and first and second data conductors (4,5) supported lengthwise on the support and configured to transmit data signals (column 4 lines 25-27); but Davis lacks the rail system comprising a second set of power conductors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding claim 23, the modified Davis discloses the system (1), wherein if the first set of power conductors (6) are identified as A and B, the second set of power conductors (not shown but located next to the first set of power conductors) are identified as C and D, and the data conductors (4,5) are identified as E and F, the conductors are disposed cross-sectionally on the support (1); but Davis lacks the conductors being disposed cross-sectionally on the support in the order the order being A, C, E, F, D, B. It would have been obvious to one having ordinary skill in the art at the time the invention was made to disposed the conductors on the support in the order A, C, E, F, D, B, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 24, the modified Davis discloses the system (1), wherein conductors A and B (6; first set) can be configured to transmit ac power. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 25, the modified Davis discloses the system (1), wherein conductors C and D (not shown, second set) can be configured to transmit dc power. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 26, the modified Davis discloses the system (see figures 1 and 8-10), wherein the first set of power conductors (6, see figure 8) can be identified as A and B, the second set of power conductors (not shown but located next to the first set of power conductors) can be identified as C and D, and the data conductors (4,5) can be identified as E and F, the conductors are disposed cross-sectionally on the support (1); but Davis lacks the conductors being disposed cross-sectionally on the support in the order A, E, C, D, F, B. It would have been obvious to one having ordinary skill in the art at the time the invention was made to disposed the conductors on the support in the order A, E, C, D, F, B, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 27, Davis discloses the system (1), wherein conductors A and B (6; first set) can be configured to transmit ac power. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 28, Davis discloses the system (1), wherein conductors C and D (not shown, second set) can be configured to transmit dc power (see figure 1). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 31, Davis discloses the system (1), wherein the conductors (6; 4 are 5) are disposed at substantially equal spacing across the support (see figure 1).

Allowable Subject Matter

4. Claims 32-37 are allowed.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 32-37 is:

Regarding claims 32-37, the prior art does not teach or fairly suggest in combination with the other claimed limitation an open rail system comprising a capacitor coupled across the first set of power conductors

This limitation was found in claims 32-37, and is neither disclosed nor taught by the prior art of record, alone or in combination.

5. Claims 16, 29, 30 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reasons for the indication of the allowability of claims 16, 29, 30 and 39 are:

Regarding claim 16, the prior art does not teach or fairly suggest in combination with the other claimed limitation a rail system comprising at least one capacitor coupled across the power conductors.

Regarding claims 29 and 30, the prior art does not teach or fairly suggest in combination with the other claimed limitation a rail system comprising a first capacitor coupled across the second set of power conductors.

Regarding claim 39, the prior art does not teach or fairly suggest in combination with the other claimed limitation comprising at least one capacitor coupled across the power conductors.

These limitations were found in claims 16, 29, 30 and 39, and are neither disclosed nor taught by the prior art of record, alone or in combination.

Response to Arguments

6. Applicant's arguments with respect to claims 14-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AE

April 25, 2005


Angel R. Estrada
Patent Examiner
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